

Motorola

AUTO RADIO

MODEL
CTA5

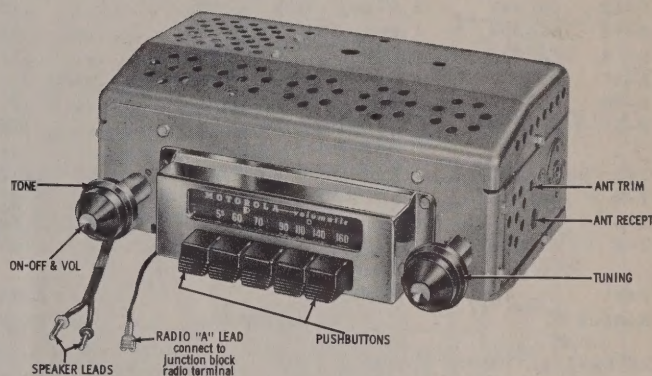
S E R V I C E M A N U A L

GENERAL INFORMATION

TYPE - Automotive type superheterodyne receiver designed for custom installation in the 1955 CHEVROLET cars. This radio operates from a 12 volt battery source.

TUNING RANGE - 540 - 1605 Kc **IF** - 265 Kc

TUBE COMPLEMENT - 12BD6 RF amp; 12BE6 conv; 12BD6 IF amp; 12CR6 Det, AVC, 1st AF amp; 12AQ5 pwr amp; 12X4 rect.



TO SET THE PUSHBUTTONS

This receiver has "Push to Lock" pushbuttons for automatic station selection.

To set the pushbuttons for automatic tuning, proceed as follows:

1. Tune in the desired station with the manual tuning knob.

Tune carefully until you are exactly on the station.

2. Pull out the first pushbutton to be set, to unlock the button for station set-up, and then push button in firmly to set and lock the button.

3. Follow the above procedure for the remaining four buttons.

REPLACEMENT PARTS LIST

NOTE: When ordering parts, specify model number of set in addition to part number and description of part.

Ref. No.	Part Number	Description	List Price	Ref. No.	Part Number	Description	List Price
ELECTRICAL PARTS				C-19	8K122076	Paper Tub: .5 mf 100V.....	.35
Capacitors (Cer = Ceramic; Tub = Tubular; Mld = Molded; Lytic = Electrolytic)				C-20	8K122076	Paper Tub: .5 mf 100V.....	.35
C-1	21A591682	Mica, metal: 90 mmf 500V....	.20	C-21	*8R121004	Paper Tub: .02 mf 1000V....	.35
C-2	20A501419	Trim, mica: 50 mmf nom.....	.40	C-22	*21R400935	Cer Disc: 22 mmf 500V.....	.15
C-3	21R410112	Cer Disc: 150 mmf 500V.....	.25	C-23	8K122076	Paper Tub: .5 mf 100V.....	.35
C-4	21R120936	Cer Disc: 560 mmf 500V.....	.25	F-1	65K16248	Fuse: 9 amp.....	.05
C-5	20B534320	Mica, 5 in 1: C-5A, 47 mmf; C-5B, 200-230 mmf; C-5C, var 40 mmf nom; C-5D, 47 mmf; C-5E, var 460 mmf nom.	1.45	G-1	48B522000	Vibrator, 12V.....	4.70
C-6	21R120547	Cer Tub: 8.2 mmf 500V.....	.25	I-1	65T533821	Bulb, pilot: 12-18V #1891..	.25
C-7	8R121567	Paper Tub: .05 mf 400V.....	.25	LS-1	50C534819	Speaker, PM: 6" x 9"; 3.2 ohm VC.....	7.75
C-8	8R121005	Paper Tub: .05 mf 200V.....	.25	L-1	24K533629	Coil, ant.....	.80
C-9	8R121002	Paper Tub: .01 mf 400V.....	.25	L-2	*24A532108	Coil, trap.....	.55
C-10	8R121006	Paper Tub: .1 mf 400V.....	.25	L-3	24K533629	Coil, RF.....	.80
C-11	8R121568	Paper Tub: .002 mf 600V....	.30	L-4	24K533628	Coil, osc.....	.60
C-12	8R121566	Paper Tub: .02 mf 400V.....	.25	L-5	*24K534323	Choke, RF.....	.05
C-13	8R121566	Paper Tub: .02 mf 400V.....	.25	L-6	24A521816	Choke, hash.....	.35
C-14	21R114554	Cer Disc: 470 mmf 500V.....	.25	Resistors - Note: All resistors are insulated carbon type unless otherwise specified			
C-15	8R121000	Paper Tub: .004 mf 600V....	.35	R-1	6R6004	1 meg 20% 1/2W.....	.15
C-16	64K530177	Spark Plate.....	.05				
C-17	23A485677	Lytic:10-15-20mf/350-350-25V	2.25				
C-18	64K530177	Spark Plate.....	.05				

MOTOROLA, INC. 4545 AUGUSTA BLVD. CHICAGO 51, ILLINOIS

Ref. No.	Part Number	Description	List Price	Part Number	Description	List Price
R-2	6R6040	680 10% 1/2W.....	.15	13D534303	Escutcheon.....	1.55
R-3	6R5591	18,000 10% 1/2W.....	.15	34B534324	Scale, dial.....	.20
R-4	6R6014	330,000 20% 1/2W.....	.15	*1K534293	Shaft & Bushing.....	1.00
R-5	6R6056	47,000 20% 1/2W.....	.15	*1K534292	Shaft, pinion & disc.....	.35
R-6	6R6010	330 20% 1/2W.....	.15	26A522403	Shield, tube.....	.05
R-7	6R6291	560 10% 1/2W.....	.15	9A472148	Socket, ant.....	.25
R-8	6R5725	8200 10% 2W.....	.25	9A70208	Socket, 4 pin (vib).....	.20
R-9	6R6004	1 meg 20% 1/2W.....	.15	9A500709	Socket, pilot light.....	.15
R-10	*18K534294	Cont, vol & tone: vol 250K tap at 125K; tone 1 meg; incl sw.....	2.05	9C511642	Socket, tube: 7 pin min; with dummy lug.....	.15
R-11	6R2119	15,000 20% 1/2W.....	.15	41A485380	Spring, knob insert.....	.01
R-12	6R3927	2.2 meg 20% 1/2W.....	.15	29A76280	Term, pin: blk (spkr leads).....	.03
R-13	6R6004	1 meg 20% 1/2W.....	.15	4K512467	Washer, felt.....	.01
R-14	6R6015	220,000 20% 1/2W.....	.15	39K470032	Wiper, ground (bottom cover).....	.05
R-15	6R6015	220,000 20% 1/2W.....	.15			
R-16	6R6336	270 10% 1W.....	.20			
R-17	6R5764	2700 10% 2W.....	.25			

T-1	24B532152	Trans, 1st IF: 265 Kc.....	1.15
T-2	24K532153	Trans, 2nd IF: 265 Kc.....	1.40
T-3	25B500727	Trans, output.....	2.40
T-4	25C530737	Trans, power.....	5.40

Part Number	Description	List Price
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MECHANICAL PARTS

*7B534311	Bracket, dial bkgd.....	.30
*43K534281	Bushing, mtg.....	.15
42B485548	Clip, IF mtg.....	.01
42A522402	Clip, tube shield.....	.05
42A4215	Clip, vibrator ground.....	.10
29A534326	Connector ("A" lead).....	.03
*15C500666	Cover, bottom (tube side).....	.65
15C500663	Cover, top (wiring side).....	.95
*36B534306	Knob (dummy knob).....	.15
*36K534307	Knob (tone).....	.15
*36B534305	Knob (vol & tuning).....	.40
2B521332	Nut, clinch (side mtg).....	.01
2S7087	Nut, speed (dial scale ret).....	.01
*7B534317	Plate, dial scale ret.....	.05
*1V534339	Pointer.....	.15
*38B534308	Pushbutton.....	.10

MOUNTING PARTS AND ACCESSORIES

*7B534309	Bracket, rcvr mtg.....	.20
*7B534215	Bracket, spkr plate mtg (bot).....	.05
*7B534176	Bracket, spkr plate mtg (top).....	.05
8A4491	Condenser, noise (gen & volt reg).....	.85
*32D534214	Gasket, speaker mtg.....	.80
*1V534331	Kit, mounting parts.....	2.15
2S2876	Nut: 1/2-28 (rcvr mtg).....	.01
*64C534094	Plate, speaker mtg.....	3.45
6A4141	Suppressor, distributor.....	.30

TUNER 77D534325 (AT-155)

(See Electrical Parts Section for electrical parts.)

*77D534325	Tuner, AT-155: complete.....	20.15
	exch.....	15.15
51A500995	Clutch Drive Assem.....	2.80
76K533630	Core, iron (osc).....	.30
76K533627	Core, iron (RF & ant).....	.55
5A501013	Grommet, core mtg.....	.03
1K522379	Pointer Arm.....	.75
*76K533620	Sleeve, iron.....	.25
*41K522368	Spring, carriage take up.....	.02
41A501047	Spring, clutch bar return.....	.10
41A501096	Spring, pointer anti-backlash.....	.10
4A501039	Washer, "C" (pointer arm).....	.01

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

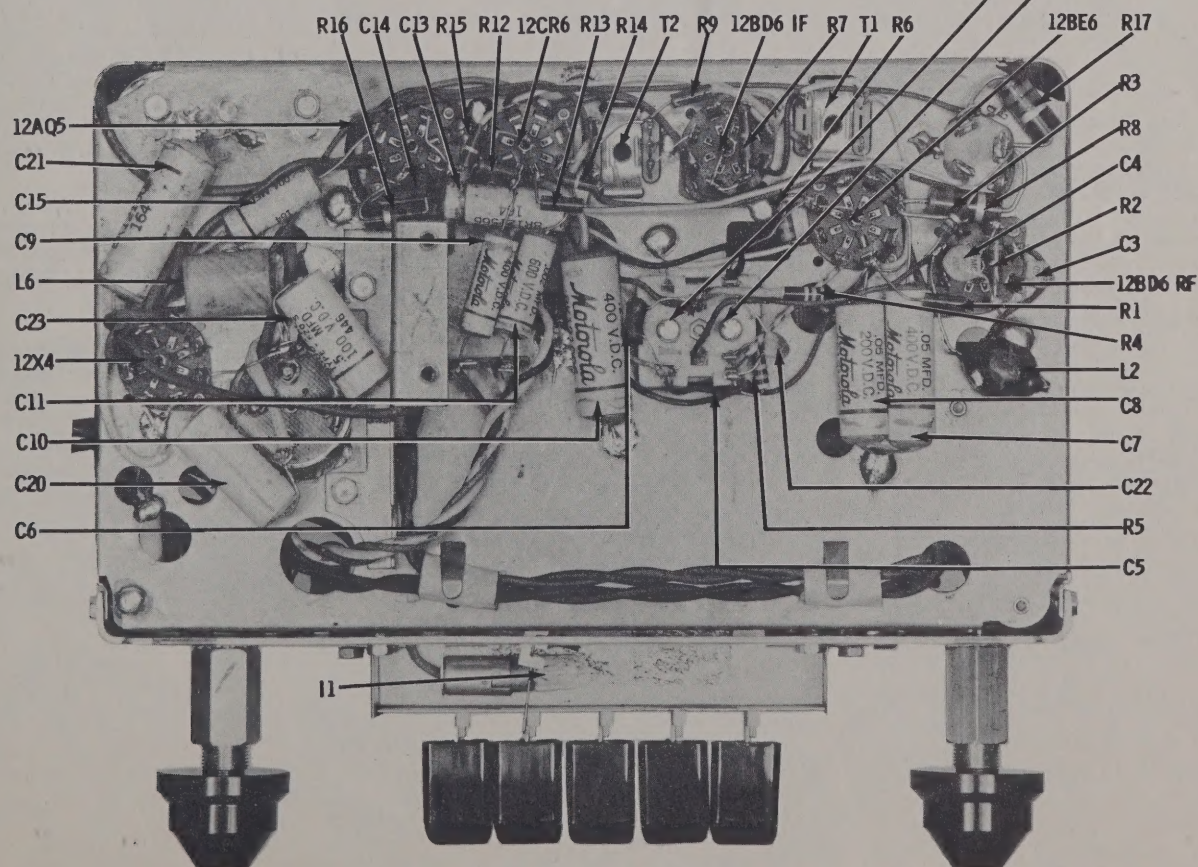
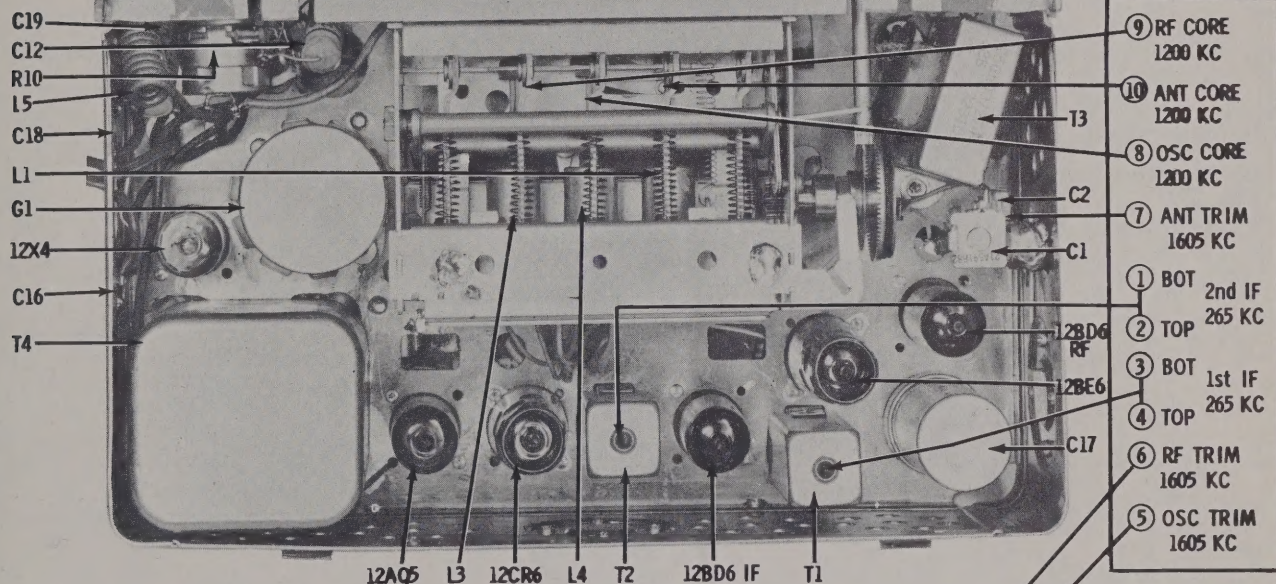
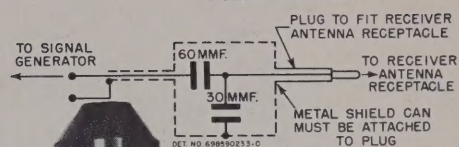
*New Item, Appears in any List for First Time

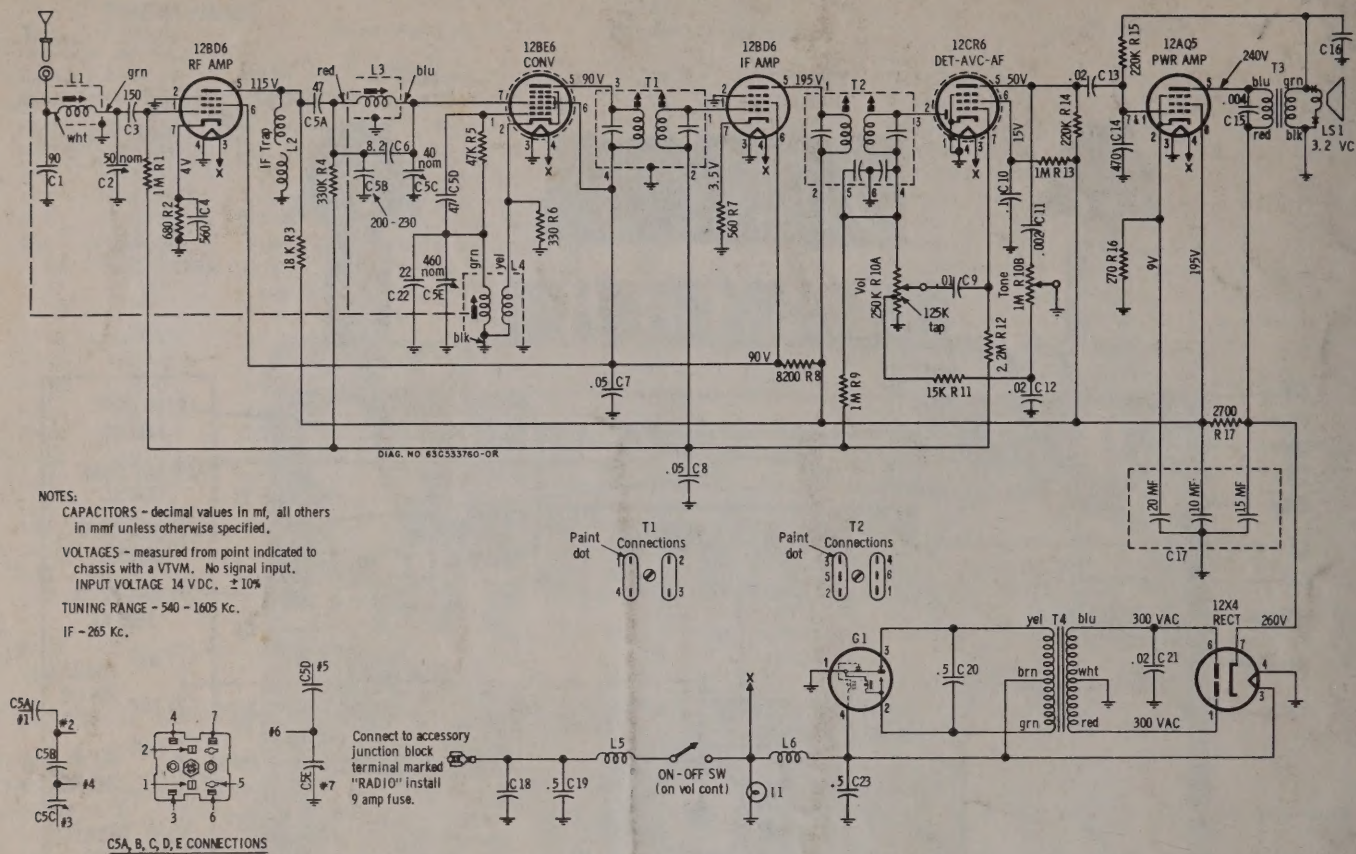
ALIGNMENT

Connect output meter across speaker voice coil. Set volume and tone to maximum. Attenuate generator output to maintain 1.79 volts (1 watt) on output meter to prevent overloading.

STEP	DUMMY ANTENNA	GENERATOR CONNECTION	GENERATOR FREQUENCY	TUNER SET TO	ADJUST	REMARKS
IF ALIGNMENT						
1.	.1 mf	Conv grid (pin 7) & chassis	265 Kc	Hi end stop	1, 2, 3, 4	Peak for maximum.
RF ALIGNMENT						
NOTE: Back tuner cores completely out of coils before proceeding. Remove escutcheon to expose core screws.						
2.	See Fig.	Ant recept	1605 Kc	Hi end stop	5, 6, 7	Peak for maximum.
3.	See Fig.	Ant recept	1200 Kc	9/32" from hi end stop	8, 9, 10	Peak for maximum using alignment tool Motorola Part Number 66A76278.
4.	Repeat steps 2 & 3 until no further increase, then cement tuner cores in place.					
5.	-	-	-	Weak station around 1400 Kc	7	With radio installed in car, peak ant trimmer.

DUMMY ANTENNA





MOTOROLA AUTO RADIO WARRANTY SERVICE STATION PROCEDURE FOR BRANDED MODELS

1. The definition of a Motorola Branded Model is one that is branded with the Motorola name, and distributed to dealers through authorized Motorola Distributors.

2. Before performing a warranty repair on a Motorola Branded Auto Radio, you must first receive from the customer the Customer's Warranty Policy. This policy must be filled out by the selling dealer at the time of retail purchase. The Customer's Warranty Policy must show the radio to be within the ninety day warranty period if the repair is to be handled under the Motorola Auto Radio Warranty Plan.

3. The removal or reinstallation of the radio, the elimination of motor noise, tire static, electrical interference, or faulty installation and aerial repairs are not considered as warranty repairs. Consequently, charges for these services are to be borne by the customer.

4. Fill in the Motorola Auto Radio Warranty Labor Claim, Part No. 54P480884, and mail White and Green copies to the Motorola Distributor serving your area. The Yellow copy is to be retained by the Warranty Service Station for his files.

5. Defective parts for warranty repairs made on Motorola Branded Auto Radios are to be sent to your Motorola Distributor for free replacement, supported with the defective parts return form which you are now using.

6. Only those service shops authorized by their Motorola Distributor can perform repairs within the warranty period on a no-charge basis to the customer. If you are not already authorized as a Motorola Auto Radio Warranty Service Station, and you are interested in handling this service, please contact your Motorola Distributor for complete details.